

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-9 (canceled)

Claim 10 (currently amended): A digital transmission method of an error correction coding, comprising:

observing transmission conditions continuously to detect at least one dynamic parameter of the current transmission conditions; [[and]]
selecting dynamically, as a function of the at least one dynamic parameter, a distribution of elementary coding step redundancies from a plurality of distributions of elementary coding step redundancies for which a global efficiency of a coding scheme resulting from a serial concatenation of an elementary coding step is equal to a predetermined target efficiency, said predetermined target efficiency being determined by a product of efficiencies of at least two elementary coding steps modified by corresponding puncturing steps;

performing a coding procedure including the at least two elementary coding steps concatenated in series with corresponding puncturing steps, and an interleaving step between said at least two elementary coding steps, each of said at least two elementary coding steps adding at least one redundancy bit to data including a sequence of at least one bit by applying the selected distribution of elementary coding step redundancies to generate a coded data including said data and the at least one redundancy bit for a transmission of the coded data over a channel; and

performing an iterative decoding procedure including at least two elementary decoding steps, deinterleaving and depuncturing steps, and puncturing and interleaving steps corresponding to said at least two elementary decoding steps to obtain, from said coded data, an estimation of said data.

Claim 11 (canceled)

Claim 12 (currently amended): The digital transmission method according to Claim [[11]] 10, wherein said performing a coding procedure modifies said puncturing and interleaving steps, and said performing a decoding procedure modifies said deinterleaving and depuncturing, and said puncturing and interleaving steps corresponding to said at least two elementary decoding steps, as a function of said selected distribution of elementary coding step redundancies.

Claim 13 (currently amended): The digital transmission method according to Claim [[11]] 10, wherein said performing a coding procedure eliminates one or more said elementary coding steps and the corresponding puncturing and interleaving steps and said performing a decoding procedure eliminates one or more said elementary decoding steps, the deinterleaving and depuncturing steps, and the puncturing and interleaving steps corresponding to said at least two elementary decoding steps, as a function of said selected distribution of elementary coding step redundancies.

Claim 14 (previously presented): The digital transmission method according to Claim 13, wherein said performing a coding procedure modifies remaining puncturing and

interleaving steps and said performing a decoding procedure modifies remaining deinterleaving and depuncturing steps, and puncturing and interleaving steps corresponding to remaining elementary decoding steps, as a function of said selected distribution of elementary coding step redundancies.

Claim 15 (currently amended): The digital transmission method according to Claim [[11]] 10, wherein said elementary coding steps are performed using convolutional codes.

Claim 16 (currently amended): The digital transmission method according to Claim [[11]] 10, wherein said elementary coding steps are performed using block codes.

Claim 17 (previously presented): The digital transmission method according to Claim 10, wherein said at least one dynamic parameter is one of a bit error, a packet error rate, a signal/noise ratio, a signal to interference plus noise ratio, a number of active users of a telecommunication system, a quality of service required by a transmission system, and a speed of movement of a user of the transmission system.

Claim 18 (previously presented): The digital transmission method according to Claim 10, wherein said observing transmission conditions and selecting a distribution of elementary coding step redundancies are executed at a transmitter, said selected distribution of elementary coding step redundancies being transmitted to a receiver.

Claim 19 (previously presented): The digital transmission method according to Claim 10, wherein said observing transmission conditions and selecting a distribution of elementary coding step redundancies are executed at a transmitter and at a receiver.